UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,917	05/19/2006	Roger Pellenc	0514-1227	9817

466 7590 10/16/2008
YOUNG & THOMPSON
209 Madison Street
Suite 500
ALEXANDRIA, VA 22314

EXAMINER	
TRAN, NGUYEN	
ART UNIT	PAPER NUMBER
2838	
MAIL DATE	DELIVERY MODE
10/16/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/579,917	PELLENC, ROGER	
	Examiner	Art Unit	
	NGUYEN TRAN	2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 June 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 May 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4/28/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1 and 2 have been considered but are moot in view of the new ground(s) of rejection. Claims 1-26 are currently amended; Claim 27 is newly added.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pfeifer et al. (US 5929597) in view of Koga (US 6268710).

Regarding claim 1: Pfeifer discloses **fig. 3** a portable self-contained electric power tool, comprising;

a first subassembly **fig. 1: 20** forming an electrical actuator and generating the mechanical action of the tool **(i.e. power tool 3, lines 35-40)**;

a second subassembly **12** forming an electric energy source **(output of 12)** and comprising essentially a rechargeable electrochemical battery **13**; and

a third subassembly forming a charger **(not shown)** adapted to carry out controlled recharging of the battery **(Col. 1, lines 23-26)**, wherein:

the second subassembly (3) **12** is portable by an operator **(Col. 1, lines 26-27)** and, or the second subassembly (3) **12** is constituted by a command **(i.e. command output from 46)** and control module (7) **46, 48** for the battery (5) **13**, in the form of an electronic device **(i.e. 46 inside of 12)** located in immediate adjacency to said battery **13** (5) and ensuring over time in a controlled manner a maximum capacity of the battery and an optimum use of the tool **fig. 1: 20;**

the first subassembly (2) **fig. 1: 20** is subjected during its operation to control by a system (8) **16** of current limitation adapted to reserve the electrochemical battery (5) **13** from which it draws energy;

the third subassembly (4) **(i.e. charger not shown in figure)** comprises at least in a source of electrical supply **(output of the charger)** whose voltage and current are suitable to recharging the battery (5) **13**,

but does not specifically discloses the second subassembly (3) is portable by an operator and is constituted by a lithium ion or lithium polymer electrochemical battery (5) formed by association of more than four cells (6) in series, each cell being comprised by one or several elements in parallel; and the electrochemical battery is lithium ion or lithium polymer battery; the electrical command and control module (7) of the battery (5) fulfilling at least tasks i) to v) as follows: i) management of charge, ii) management of discharge, iii) balancing the charge of each cell (6), iv) protection in discharge of the battery (5) as to excess current during utilization of the tool, and v) management during storage.

Koga teaches a battery monitor apparatus for a battery pack having plurality of cells connected in series that includes a controller for monitoring and protecting each battery cell over-charging and/or over-discharging with high accuracy and low cost production **(Col. 15, lines 37-42 and Col. 16, lines 5-22)**, wherein **fig. 1** the electrochemical battery **(cells in side of 1)** constituted by a lithium ion battery **(Col. 1, lines 15)** formed by associated of more than four cells in series **(battery cell)**, each cell being comprised by one or several elements **2** in parallel; and the electrical command and control module (7) of the battery (5) fulfilling at least tasks i) to v) as follows: i) management of charge, ii) management of discharge, iii) balancing the charge of each cell (6), iv) protection in discharge of the battery (5) as to excess current during utilization of the load, and v) management during storage **(Col. 15, lines 35-65 through Col. 16 and lines 35)**.

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to have replaced the controller of Pfeifer et al.'s invention with the controller for the lithium-ion battery cells and one or several elements in parallel as taught by Koga in order to have the second subassembly (3) is portable by an operator and is constituted by a lithium ion or lithium polymer electrochemical battery (5) formed by association of more than four cells (6) in series, each cell being comprised by one or several elements in parallel and the first subassembly (2) is subjected during its operation to control by a system (8) of current limitation adapted to reserve the lithium ion or lithium polymer electrochemical battery (5) from which it draws energy; and the third subassembly (4) comprises at least in a source of electrical supply whose voltage

and current are suitable to recharging the lithium ion or lithium polymer battery; and the control module of the battery fulfilling at least tasks i) to v) of Pfeifer et al.'s invention with a reasonable expectation of success because Koga teaches a battery monitor apparatus for a battery pack having plurality of cells connected in series that includes a controller for monitoring and protecting each battery cell over-charging and/or over-discharging with high accuracy and low cost production **(Col. 15, lines 37-42 and Col. 16, lines 5-22)**.

Regarding claim 2: Pfeifer et al. discloses **fig. 3** the electrical tool assembly according to claim 1, wherein electronic control **46, 48** and command module (7) **(i.e. command output from 46)** of the battery (5) **13** of the second subassembly (3) **12** is present in the form of an electronic card **(i.e. PC board in batter pack of 12)**,

but does not specifically discloses comprises at least one digital processing unit (9), comprising a microprocessor, a microcontroller, or a digital signal processor, associated with a memory and with annexed circuits, adapted together to perform, in addition to tasks i) to v), at least one of the following tasks: evaluation and display of the capacity of the battery (5), management of alarms, management and transmission of collected information, or management of the diagnostics.

Koga teaches a battery monitor apparatus for a battery pack having plurality of cells connected in series that includes a controller for monitoring and protecting each battery cell over-charging and/or over-discharging with high accuracy and low cost production **(Col. 15, lines 37-42 and Col. 16, lines 5-22)**, wherein electronic card **fig. 1** comprises at least one digital processing unit (9), comprising a microprocessor, a

microcontroller **8, 9**, associated with a memory and with annexed circuits, adapted together to perform **(Col. 3, lines 25 -60)**, in addition to tasks i) to v), at least one of the following tasks: management of the diagnostics **(Col. 15, lines 35-65 through Col. 16 and lines 35)**.

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to have replace the controller Pfeifer et al.'s invention with the microprocessor and a microcontroller that taught by Koga in order to have the controller to performing the addiction tasks of Pfeifer et al.'s invention with a reasonable expectation of success because Koga teaches a battery monitor apparatus for a battery pack having plurality of cells connected in series that includes a controller for monitoring and protecting each battery cell over-charging and/or over-discharging with high accuracy and low cost production **(Col. 15, lines 37-42 and Col. 16, lines 5-22).**

Regarding claim 3: **(fig. 2-4)** the electrical tool assembly according to claim 2, wherein for the accomplishment of the tasks of management of the charge, of management of the discharge, balancing of the charge of each cell (6), evaluation and display of the capacity of the battery (5), the command and control module (7) permanently uses the values of measurement of the voltage of each cell (6) comprising the battery (5) (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 4: It has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

However Pfeifer et al. discloses **(fig. 2-4)** the electrical tool assembly according to claim 3, wherein for a battery (5) formed of n cells (6) in series, the values of measurement of the voltage of each cell (6) are provided by an electronic acquisition channel (10) constituted principally of n identical analog modules (11) corresponding to the n cells, mounted respectively at terminals of the n cells (6) of the battery (5) and adapted to measure a voltage of the respectively corresponding cell (6), the values of voltage measured by each of the n modules (11) being then routed, one after the other, by at least one analog multiplexer (12) and after amplification by a suitable circuit (13) toward an analog/digital input converter (9') of the digital processing unit (9) forming a portion of the command and control module (7).

Regarding claim 5: the functional recitation that that the analog modules (11) for measurement of voltage perform respectively for each cell (6) a subtraction between the voltage measured at its positive terminal and the voltage measured at its negative terminal, this by means of a differential electronic assembly with an operational amplifier (11') using resistances (11") for resistive input elements has not been given patentable weight because **it** is narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a "means" for performing the specified function, as set forth *35* U.S.C. 112,6th paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. In re Fuller, 1929 C.D. 172; 388 0G. 279.

However Pfeifer et al. also discloses **(fig. 2-4)** the electrical tool assembly according to claim 4, wherein the analog modules (11) for measurement of voltage

perform respectively for each cell (6) a subtraction between the voltage measured at its positive terminal and the voltage measured at its negative terminal, this by a differential electronic assembly with an operational amplifier (11') using resistances (11") for resistive input elements (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 6: **(fig. 2-4)** the electrical tool assembly according to claim 5, wherein the electronic differential assembly with operational amplifier (11') of each voltage measuring module (11) comprises resistances or resistive input elements (11") of an impedance of about or greater than 1 Mohm so as to obtain very low loss currents and for example less than 1/20000.sup.th per hour of the total capacity of the battery (5).

Regarding claim 7: **(fig. 2-4) the** electrical tool assembly according to claim 3, wherein the values of measurement of the voltage of each cell (6) are delivered with a precision of measurement of at least 50 mV (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 8: **(fig. 2-4)** the electrical tool assembly according to claim 7, wherein the precision of measurement of the voltage of at least 50 mV is obtained by calibration during production of the electronic card of the command and control module of the battery (7) (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 9: **(fig. 2-4)** the electrical tool assembly according to claim 8, wherein the calibration during manufacture of the electronic card comprises in introducing by programming into the digital processing unit (9), for each module of voltage measurement (11), parameters for correcting errors as a function of the

measurement of one or several very precise reference voltages, that are substituted for this calibrating operation for the normal voltages measured at the terminals of each cell (6) (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 10: **(fig. 2-4)** the electrical tool assembly according to claim 2, wherein the task of balancing the charge of the cells (6) relative to each other is managed by the digital processing unit (9) which controls based on the values of measurement of voltage of each cell (6), a development of the charge current by dissipater circuits based on electronic switches (14) associated with resistive elements (14') (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 11: **(fig. 2-4)** the electrical tool assembly according to claim 2, wherein the task of managing the discharge comprises in continuously scrutinizing the voltage data of each cell (6) of the digital processing unit (9), in interrupting the discharge when the digital processing unit (9) detects that one of the voltages of the cell (6) has reached the minimum discharge threshold set by the producer of lithium ion or lithium polymer elements and in cutting the discharge by deactivating a switching component (15) of the discharge, thereby leading to stopping the tool (2) and by activating, for example, a sonic or visual alarm (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 12: **(fig. 2-4)** the electrical tool assembly according to claim 3, wherein the tasks of managing the charge, of evaluating and displaying the capacity of the battery (5) and of protection from over-voltage during discharge, are managed continuously by the digital processing unit (9) by an analog electronic circuit (16) for

measurement of the current of the charge and discharge of the battery (15) (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 13: **(fig. 2-4)** the electrical tool assembly according to claim 12, wherein during the task of managing the charge, while the third subassembly forming a charger (4) is connected to the second subassembly (3) at the electronic card of the command and control module (7) of the battery (5), the end of the charge is obtained by opening the switching component of the charge (17) which is controlled by the digital processing unit (9) when said unit (9) detects by means of the digital electronic circuit (16) for measuring the charge and discharge current, a drop in the charge current to a predetermined threshold, for example 50 mA, for the battery (5) or the temperature of the battery (5) exceeds a permitted limit value or that the charging is prolonged during a time greater than a given fraction of the theoretical charge time (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 14: **(fig. 2-4)** the electrical tool assembly according to claim 12, wherein the task of evaluation and display of the capacity of the battery (5) is managed by the digital processing unit (9) computing said capacity by taking into account continuously, during charge and during use of the tool, on the one hand, information as to the instantaneous current of the charge and discharge of the battery (5) delivered by the analog electronic circuit for measuring the current of charge and discharge (16) the values of measurement of voltage of each cell (6) and for more precise computation, their known mean internal resistance (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 15: **(fig. 2-4)** the electrical tool assembly according to claim 2, wherein that the task of protection from over-current during the discharge of the battery (5) during use of the tool, adapted to preserve the lithium ion or lithium polymer battery from premature aging or from exaggerated heating, comprises either in cutting the discharge current in the case of very large impulsional exceeding of the maximum discharge current for the battery (5) or by exceeding the maximum limit temperature permitted for this latter, or by limiting the discharge current as a function of the energy consumed by the tool during a certain running time, given that the value of the energy of the running time is predetermined experimentally as a function of the tool, of it use and of the desired lifetime for the lithium ion or lithium polymer battery (5) forming a portion of the second subassembly (3) (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 16: **(fig. 2-4)** the electrical tool assembly according to claim 15, wherein the limitation of discharge current is managed by the unit (9) for digital processing by applying a command for modulation of impulse width (MLI), generated either directly by said unit (9), or by a specialized component, or of a piloting stage (18), with a switching component of the discharge (15) provided in the form of a component of the MOSFET channel N type (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 17: **(fig. 2-4)** the electrical tool assembly according to claim 2, wherein, when the tool assembly is not charging and has not been used for a predetermined period, the digital processing unit (9) automatically performs a task of

management of storage which comprises in verifying whether the residual capacity of the battery (5) is greater or not than the storage capacity predetermined by the manufacturer or lithium ion or lithium polymer elements and, if the residual capacity is substantially superior to the storage capacity, in triggering by the digital processing unit (9) an automatic discharge of the battery with the help of resistive circuits (14, 14') connected in parallel with each cell (6), this until the storage capacity is reached, and then stopping all the electronic circuits while placing the processing unit (9) is standby in low consumption mode and, if the capacity is below the storage capacity, in triggering by the digital processing unit (9) a sonic and/or visual alarm (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 18: It has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

(fig. 2-4) the electrical tool assembly according to claim 2, wherein the digital processing unit (9) is adapted to detect the connection of the charger (4) under voltage to the battery (5) of a voltage measurement by the command and control module (7) at least one of the terminals (20) of the second subassembly (3) adapted to be connected to said charger (4) (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 19: **(fig. 2-4)** the electrical tool assembly according to claim 18, wherein the function of detection of the connection of the charger (4) under voltage to the battery (5) is carried out of a particular suitable measuring circuit (19), permitting,

while the tool is stored in non-use phase, by detecting the instant at which at least one cell (6) achieves the minimum voltage set by the manufacturer, thereby to trigger an automatic recharge of the battery (5) (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 20: **(fig. 2-4)** the electrical tool assembly according to claim 18, wherein when the command and control module (7) detects an excessive or insufficient voltage of the charger (4) at the corresponding connection terminals (20) of the second subassembly (3), the digital processing unit (9) which uses this information commands the stopping of charging and triggers a sonic and/or visual alarm (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 21: **(fig. 2-4)** the electrical tool assembly according to claim 2, wherein the task of managing the information and diagnostics consists in storing in the memory of the digital process unit (9) information acquired during the use of the tool including at least one of: a number of recharges, a total of the hours of use of the tool, a development of the capacity of the battery (5) with time or, a mean energy consumed by the tool or the like, this information being adapted to be transmitted by means of a wire connection (23), radio frequency of infrared toward a separate exploitation terminal, of the personal computer type, electronic personal assistant, GSM, or the information can be transmitted via Internet (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 22: **(fig. 2-4)** the electrical tool assembly according to claim 2, wherein the command and control module (7) of the battery (5) forming a portion of the

second subassembly (3) forming a source of rechargeable electrical energy is associated with the electronic command and control module of the actuator (2) on the same electronic card, with the use of same digital processing unit (9) (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 23: **(fig. 2-4)** the electrical tool assembly according to claim 1, wherein the electronic command and control module (7) of the battery (5) comprises for each cell (6) redundant security circuits for stopping charging (21), adapted to control each individually, in case of over-voltage of a cell (6), the general stopping of the charge by deactivating directly a switching component (17) for the charge without disturbing the digital processing unit (9) (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 24: It has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

(fig. 2-4) the electrical tool assembly according to claim 12, wherein the electronic command and control module (7) comprises a redundant circuit for stopping discharge (21'), adapted to control the stopping of discharge in the case of detection of a discharge current equal to or greater than a maximum admissible value for the battery (5) by the analog electronic measuring circuit (16), by directly deactivating the switching component (15) of the discharge without disturbing the digital processing unit (9) (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 25: the electrical tool assembly according to claim 1, wherein

the third subassembly (4) forming a charger adapted to recharge the lithium ion or lithium polymer battery (5) generates a voltage with a precision of about 0.5% and a regulated current, obtained of a specialized circuit for regulation of voltage and current (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 26: **(fig. 2-4)** the electrical assembly according to claim 1, wherein each functional subassembly (2, 3 and 4) is mounted in a protective housing and/or a grippable housing, which can be connected together two by two by flexible deconnectable cables (22, 22') for the transfer of energy and the transmission of command and/or control signals between said subassemblies (2, 3, 4) (Col. 3, lines 13-26; Col. 4, lines 13-30 and Col. 5, lines 5-15).

Regarding claim 27: Pfeifer et al. discloses **fig. 3** the claimed invention except that the electric power tool (i.e. is power drill) instead of the electrical tool assembly is pruning shears, a chainsaw, a fruit collecting tool, a lawnmower with wires, or a jackhammer. Pfeifer et al. shows that the electric power tool (i.e. is power drill) is an equivalent structure known in the art. Therefore, because these two (i.e. the electric power drill and pruning shears, a chainsaw, a fruit collecting tool, a lawnmower with wires, or a jackhammer) were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute for the pruning shears, a chainsaw, a fruit collecting tool, a lawnmower with wires, or a jackhammer.

Conclusion

Examiner's note: **Examiner has cited particular figures, columns and line numbers in the reference applied to the claims above for the convenience of the applicant**. Although the specified citations are representative of the teaching of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. **It is respectfully requested from the applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner**.

In the case of amending the claimed invention, Applicant is respectfully requested to indicated the portions(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NGUYEN TRAN whose telephone number is (571)270-1269. The examiner can normally be reached on M-F 7:30-5:00, OFF every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ullah Akm can be reached on 571-272-2361. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NT

/BAO Q. VU/
PRIMARY EXAMINER, ART UNIT 2838
OCTOBER 14, 2008